REMARKS

The following remarks are intended to be fully responsive to the Office Action mailed October 26, 2004. Claims 1-15 are pending. Claims 4-7 and 12-15 are withdrawn from consideration. Claims 1-3 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Reichenberger, U.S. Patent Number 4,078,628. Applicants have amended claims 9, 10, and 11.

Applicants' independent claims 1 and 8 recite a vehicle comprising "a by-wire braking system responsive to electronic control signals..." Reichenberger does not disclose a by-wire braking system.

The Examiner cites reference character 32 of the Reichenberger reference as identifying a by-wire braking system. The Reichenberger reference states that "[l]inear actuator 30 is mechanically connected to the existing automotive brake system 32..." at column 2, lines 24-25. (emphasis added). This is the only description of the brake system 32 in Reichenberger, and the words "by-wire" do not appear anywhere in the specification. It is therefore submitted that there is no support for the Examiner's conclusion that the Reichenberger brake system 32 is a "by-wire" brake system as recited by applicants' independent claims 1 and 8. It is further submitted that, as shown in Figure 1 of the Reichenberger reference, the brake system 32 is a conventional hydraulic brake system to which a handicap control device is added and cannot be said to disclose applicants' "by-wire" brake system.

Accordingly, independent claims 1 and 8 are not anticipated by Reichenberger and are in condition for allowance. Claims 2-3 ultimately depend from claim 1 and are allowable for at least the same reasons that claim 1 is allowable.

Applicants' dependent claim 3 additionally recites a vehicle comprising a steering hand wheel and a braking ring "wherein the steering hand wheel and the braking ring are characterized by a common axis of rotation." Reichenberger does not disclose

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that "control wheel 12" is rotatable, and thus does not disclose that steering wheel 10 and control wheel 12 "are characterized by a common axis of rotation," as recited by claim 3.

The Examiner makes reference to the Reichenberger abstract and column 1, lines 45-54 in support of his statement that Reichenberger discloses a steering hand wheel and a braking ring characterized by a common axis of rotation. The Reichenberger sections cited by the Examiner provide that a second wheel is mounted concentrically with a steering wheel, but do not specify a common axis of rotation. In fact, there is no disclosure whatsoever indicating that the Reichenberger control wheel 12 is even rotatable.

Accordingly, dependent claim 3 is not anticipated by Reichenberger and is in condition for allowance.

Applicants' independent claim 8 also recites "a steering column including a rotatable steering shaft extending from the passenger compartment to the engine compartment." Reichenberger does not disclose such a steering shaft.

There is no disclosure in the Reichenberger specification or figures regarding a steering shaft extending from a passenger compartment to an engine compartment. In fact, there is no disclosure regarding an engine compartment in the specification or drawings, and the phrase "engine compartment" is not mentioned anywhere in the Reichenberger patent.

It is well settled that for a § 102 rejection to be proper, each and every element set forth in a claim must be expressly or inherently described in a single prior art reference. See MPEP § 2131.

As previously stated, it is apparent that a steering shaft extending from a passenger compartment to an engine compartment is not expressly described in Reichenberger. The Examiner is reminded that to rely on the inherency of a claimed

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element or feature in a prior art reference, the Examiner must provide extrinsic evidence that the claimed element or feature is necessarily present in the reference. The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). See also MPEP § 2112.

The Examiner has not shown that a steering shaft extending from a passenger compartment to an engine compartment is necessarily present in Reichenberger. Indeed, there are numerous applications such as, for example, a rear engine or mid engine vehicle in which the steering shaft does not extend from the passenger compartment to the engine compartment. Accordingly, the rejection of claim 8 under 35 U.S.C. § 102(b) is improper.

Applicants' independent claim 8 further recites a vehicle comprising "a transducer operatively connected to the braking ring to convert the effects of driver manipulation of the braking ring to electronic control signals and transmit the electronic control signals to the by-wire braking system." Reichenberger does not disclose such a transducer.

The Examiner reads the Reichenberger transducer 36 as disclosing applicants' transducer of claim 8 identified hereinabove. The Reichenberger transducer 36 is not adapted to "convert the effects of driver manipulation of the braking ring to electronic control signals and transmit the electronic control signals to the by-wire braking system," as recited by claim 8. As shown in Figure 1 of the Reichenberger reference, the transducer 36 is connected to the linear actuator 30, not control ring 12, and transmits signals to the error amplifier 20 in response to the linear actuator; there are no signals whatsoever being transmitted to the brake system 32 from transducer 36. Additionally, column 2, lines 34-37 of the Reichenberger reference provide "A position

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transducer 36 maybe [sic] connected as shown to balance the signal from position sensor 16 when the throttle or brake system has advanced in accordance with the initial control input." This citation makes clear that the transducer 36 is adapted to balance the signal from position sensor 16 which is transmitted to error amplifier 20, and does not convert driver manipulation of ring 12 to electronic signals transmitted to the brake system 32.

Accordingly, independent claim 8 is not anticipated by Reichenberger and is in condition for allowance.

Claim 9 similarly recites "a transducer operatively connected to the member to convert driver manipulation of the member to electronic braking control signals." Accordingly, the analysis presented for claim 8 also applies to claim 9. Moreover, Applicants' independent claim 9 as amended also recites a vehicle comprising "a plurality of sensors adapted to monitor a plurality of vehicle characteristics and generate sensor signals in response to said vehicle characteristics." The Reichenberger reference does not disclose any such sensors.

Applicants' independent claim 9 as amended further recites a vehicle comprising "a controller configured to generate a plurality of actuator control signals in response to said electronic braking control signals and said sensor signals." The Reichenberger reference does not disclose such a controller.

Accordingly, independent claim 9 is not anticipated by Reichenberger and is in condition for allowance. Claims 10-11 ultimately depend from claim 9 and are allowable for at least the same reasons that claim 9 is allowable.

Applicants' dependent claim 11 additionally recites a vehicle comprising a steering hand wheel and a braking ring "wherein the steering hand wheel and the braking ring are characterized by a common axis of rotation." Reichenberger does not disclose such a device for the same reasons identified hereinabove with respect to dependent claim 3.

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CONCLUSION

In light of these amendments and remarks, it is respectfully submitted that that all claims are in condition for allowance, which action is requested.

The undersigned attorney is acting in a representative capacity in this application under 37 C.F.R. § 1.34(a). If further proof of authority to act in a representative capacity is required in this application, please notify the undersigned via the correspondence address associated with this application.

Respectfully submitted

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Date: January 26, 2005

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